MAKING INTEREST ARBITRATION COSTLY: A POLICY PROPOSAL

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ABSTRACT
It has long been acknowledged that the imposition of financial costs on bargaining parties, who request an arbitrator to resolve their disputes, will encourage parties to settle without the use of arbitration. This article outlines a proposal to charge parties using conventional arbitration a fee based on both the magnitude of the difference in their positions and on the size of the bargaining unit in question. The procedure, called “cost-formula arbitration,” has three advantages over alternative cost-imposition techniques. First, the imposed costs will provide a more substantial incentive to settle than would be the case with most other schemes. Second, the parties will have incentives to maintain their genuine offers at the stage at which arbitration is invoked. Finally, the inducements to settle voluntarily are not dissipated when the size of bargaining units is large.

INTRODUCTION
The growth of public sector collective bargaining in the 1960’s and 1970’s has given rise to a wide variety of proposals for resolving bargaining impasses without strikes. Whereas thirty years ago, bargaining advocates considered conventional arbitration to be the alternative to the right to strike, the menu of alternatives now includes final-offer arbitration (by package, by issue, or with the fact finder’s report as an option), repeated-offer selection, modified final-offer arbitration, multiple-offer selection, closed-offer procedures, and statutory
strikes [1–4]. A number of these procedures have been used in the public and, occasionally, the private sectors.

The purpose of this article is to propose a new variation of arbitration, which we shall call “cost-formula arbitration.” The procedure is based on previous research that examined, *inter alia*, the effects of imposing arbitration costs on the likelihood of settlements being negotiated by the parties themselves [5, 6]. Unlike some previous proposals to impose costs on arbitral usage, this procedure would create incentives for parties to modify their positions even at the stage in which arbitration is being invoked. Additionally, the proposed policy would have similar effects on arbitral usage for bargaining units of different sizes.

First the proposal will be outlined and a number of salient characteristics of the procedure will be discussed. The procedure will then be compared to alternative impasse resolution techniques. Finally, conclusions will be presented.

**COST-FORMULA ARBITRATION: A PROPOSAL**

The notion underlying this proposal is that the imposition of substantial direct costs on the usage of arbitration can enlarge the contract zone, i.e., the set of feasible outcomes the two parties would accept with certainty in preference to taking the risk of going to arbitration. Where no positive contract zone exists, the parties will always use arbitration. While the existence of a positive contract zone is a necessary condition for a negotiated settlement, it is not a sufficient condition, since the exigencies of negotiating strategy frequently induce the parties to mislead each other and this may entail the parties being unable to locate an existing positive contract zone. The assumption will be made here that the larger the contract zone, the more likely are the parties to locate the zone, and thus, the more likely they are to negotiate a settlement without the use of arbitration.¹

Previous proposals aimed at increasing the incentives to reach agreement prior to arbitration by imposing arbitration costs have usually carried the implicit assumption that the parties would split some fee which was fixed in advance, or which was some function of the length of the arbitration hearing.² Proposals of this type contain a number of difficulties. First, costs that might provide a substantial incentive to bargain in small bargaining units might be viewed as trivial in larger units. Thus, when a small municipal branch of government deals with fifteen employees, imposing substantial arbitration costs may almost preclude arbitration. On the other hand, when a state government negotiates with a unit of thousands of employees, the same absolute costs may provide no effective deterrent to reliance on arbitration.³ Therefore, the effect of such

¹ Reference [7] provides a view in which the likelihood of a negotiated outcome need not be a direct function of the size of the contract zone.

² Reference [8] provides an exception, but one which relates only to grievance arbitration.

³ Although the assumption underlying the entire argument of this article is that the use of arbitrated outcomes should be discouraged, problems arise if, for some bargaining units, arbitration becomes so costly that neither side can contemplate its use.
cost-allocation procedures ranges from the virtual preclusion of arbitration in some cases to the provision of only the most trivial incentive to negotiate in others. This unevenness of effect is reinforced by the presence of other costs of arbitration usage which do not vary proportionately with bargaining unit size, e.g., lawyers' fees. It follows that arbitration costs should somehow be made a function of bargaining unit size [9, pp. 153-154].

Another problem arises when the parties realize during a particular set of negotiations that their differences are so intractable that arbitration must be used despite the costs. In this situation, the imposition of fixed costs provides little incentive for the parties to make "reasonable" offers, i.e., to make their positions converge. Indeed, it has been widely believed that the dynamics of conventional — as opposed to final-offer — arbitration provide disincentives for such "reasonableness." [1, 10-12] This is a problem because the arbitrator may be presented with little information about the parties' preferences that would aid in fashioning a workable, equitable, and efficient (in a Pareto Optimality sense) award.4

These problems can be overcome if the costs of conventional arbitration that the parties are required to pay are made a function of both the size of the bargaining unit and the magnitude of the difference in the final positions the parties submit in arbitration. Such a cost scheme should similarly affect bargaining units of different sizes and should cause a convergence of the parties' offers, thus providing valuable information to the arbitrator in those cases where negotiations fail to produce agreement. Such a cost-allocation system is described below.

The first step is to calculate the monetary value of the positions of the two parties, as presented at the opening of the arbitration hearing, on all issues that can be put into monetary terms. The difference in value per full-time equivalent employee between the parties' proposals is then multiplied by the average number of full-time equivalent employees in the bargaining unit over the previous year. All items that can possibly be given a monetary value are included here. This figure is then annualized so that the difference in cost between the positions of the two parties over a year is calculated. If the contract proposed by a party is for a period either longer or shorter than a year, the yearly average over the contract period is used.

The impact of items that cannot be monetized, e.g., union security provisions, can also be taken into account. This can be accomplished by multiplying the number of proposals for change in the status quo on nonmonetary items which are not mutually beneficial — as discussed below — by some fraction. The resulting number plus one is then multiplied by the monetary value outlined above. Thus, each additional disagreement on a nonmonetary item raises the total monetary value of the calculation by a fixed percentage. Finally, this total figure is multiplied by some predetermined percentage that we may refer to as

4 Reference [4, pp. 306-307] argues that the provision of such information should be a major criterion by which interest arbitration procedures are evaluated.
the arbitration tax rate. The resulting number of dollars is charged to each party as the cost of using arbitration. We shall refer to this procedure as "cost-formula arbitration."

Symbolically the formula is:

\[ C = [t \times n \times d] \times [1 + XN] \]

where

- \( C \) = charge to each party for the use of arbitration.
- \( t \) = arbitration tax rate, i.e., the percentage of the disputed "pie" to be charged to each party, divided by 100.
- \( n \) = number of full-time equivalent employees in the bargaining unit over the preceding year.
- \( d \) = annualized difference in the monetary value per full-time equivalent employee in the positions of the parties.
- \( X \) = the percentage by which the charge to each party is increased for each nonmonetary item in dispute, divided by 100.
- \( N \) = number of proposed changes in nonmonetary items which are not mutually beneficial.

Given that the parties are using arbitration, it will be to their mutual benefit to understate the scope of their disagreements so as to reduce the arbitration costs they both face. Accordingly, an impartial body, presumably a state public sector labor relations board, will have the responsibility of doing the calculations and thus determining the cost of arbitration.

A simple example may clarify the procedure. Suppose the difference in the proposals of the union and management, as originally presented to the arbitrator, comes to $1.35 per hour. Suppose further that the bargaining unit contains the full-time equivalent of one thousand employees and that no nonmonetary items remain in dispute. If the full-time work year is eighteen hundred and fifty hours, then the annualized difference in the parties' positions is $1.35 \times 1000 \times 1850$, or $2,497,500$. If the tax rate for using arbitration is set at 1 per cent, then the charge to each party for the use of arbitration in this case is $24,975, about $25 per employee for both labor and management. If the parties were instead able to reduce the difference between their positions to $.80 per hour, the tax each party would pay would be $80/135 \times 24,975, or $14,800. Similarly, the cost would vary proportionately with the size of the bargaining unit, ceteris paribus.

**ISSUES**

A number of issues relevant to the use of this procedure are apparent. First is the question of whether the parties may avoid the tax by settling voluntarily after the arbitration hearing has begun. It is argued here that they should not be allowed to do so. Otherwise, the parties will have an incentive to seek clues
during the hearing as to the arbitrator’s feelings and then to withdraw from the
hearing and negotiate an agreement that is really only a ratification of the
prospective award. The availability of such de facto arbitration at virtually no
cost would frustrate the negotiating incentives built into the cost-formula-
arbitration concept.

Another issue is that there will be difficulty in calculating the values of some
monetary items. The value of a cost-of-living adjustment clause comes
immediately to mind. In this case, the simplest solution may involve using the
previous year’s rate of increase in the Consumer Price Index (or an average of
recent years) as a benchmark. Similarly, the average number of hours each
employee will work over the coming year is unknown, but the previous year’s
figure or an average for several recent years should suffice. Other problems may
be similarly overcome. In the public sector, the government agency charged
with overseeing the operation of collective bargaining in the jurisdiction in
question should be charged with producing a set of guidelines to deal with such
issues. It will probably be more practical to use simple rules of thumb like the
ones stated above than to use more accurate, but more complex, forecasting
procedures.

However, the difficulties involved in reconciling disagreements about the cost
of various collective bargaining proposals must not be underestimated. In many
cases, the question of how much a particular proposal costs is a major issue,
sometimes the major issue, in dispute between the parties. In bargaining
situations where this is frequently the case, cost-formula arbitration may not
prove the best approach to dispute resolution.

It is clear that the formula, as stated above, will produce trivial or zero costs
in those cases where the magnitude of remaining disagreements on monetary
items is trivial or nonexistent, regardless of any remaining disagreements relating
to nonmonetary items. This problem could be most easily overcome by
specifying a minimum specific dollar tax per nonmonetary disagreement in all
cases. For example, if the minimum tax were $2.00 per issue per full-time
equivalent employee, then, in our unit of one thousand in the example above,
disagreement on two nonmonetary items (e.g., union demands for the union
shop and arbitration of grievances over merit pay increases) and on no monetary
items would produce a tax per party of $4,000 for the use of arbitration. It
might be argued that this flat fee approach is the appropriate way to deal with
items that cannot be monetized even when there are disagreements about
monetary items. However, to the extent that the magnitude of disagreement
over monetary items is correlated with the number of nonmonetary items in
dispute, the technique of adding a fixed percentage of the monetary disagree-
ment for each nonmonetary disagreement will provide added incentives for the
parties to moderate their positions on monetary items.

If each proposal for a change in the status quo on a nonmonetary item were
taxed, then compromise proposals would be discouraged. For that reason, only
non-mutually beneficial proposals for change should be taxable. For example, in a bargaining unit without a union security agreement, the union may demand a union shop. Such a demand is taxable. If management were to offer the compromise of a maintenance-of-membership agreement, this should not be taxable, since it reduces the scope of disagreement.

The test here is whether the union will certify that it prefers management's current offer to the status quo. If so, management's offer is not taxable. It may seem that the union would have an incentive to claim it prefers all of management's offers on nonmonetary items to the status quo, even those which it does not, so as to save on arbitration costs. This impression is incorrect because it ignores the effect of such a claim on the arbitrator's behavior. Thus, if there is a disagreement over work rules with each side seeking to change the status quo in its favor, the union would be loath to claim it preferred management's offer to the status quo since this would certainly assure that the arbitrator would include management's offer in the award in preference to the more desirable status quo.

An obvious question involves the level at which the arbitration tax rate should be set. This is an empirical matter that may require some experimentation. The problem is to calculate the elasticity of arbitration usage with respect to changes in the tax rate. That is, as the tax on arbitration is increased, how great is the reduction in arbitration usage? Once this information is available, policy makers can set the tax rate so as to produce the mix of voluntary settlements and arbitration awards they think appropriate.

The question must arise as to how arbitration tax revenues are to be disposed of. It is clear that they must not, in theory or in fact, revert to the treasury of the public agency that is the employer in the dispute. Some portion of the revenue could be used in providing the actual arbitration services, funding the government agency which oversees public sector collective bargaining in the jurisdiction, etc. These uses may exhaust or more than exhaust the revenues. If any are left over, they may be turned over to the general revenue of some level of government not involved in the dispute.

A final issue involves the "distortion" of outcomes produced by the operation of the scheme. There is no reason to presume that either negotiated or arbitrated outcomes under cost-formula arbitration will mimic those that would obtain if strikes were permitted or if any other impasse procedure were used. That is to say, cost-formula arbitration, like any other impasse procedure, alters the location of the contract zone and may therefore affect negotiated outcomes [1, p. 104]. There is no obvious reason to think that the pattern of negotiated settlements emerging under cost-formula arbitration will systematically favor one side or the other, or even that this pattern will be any less desirable than the one emerging from some other impasse procedure. However, if policy makers feel that the procedure produces results systematically biased against one side, this

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5 Reference [5] shows formally the effect of costs on negotiated outcomes.
can be rectified by the simple expedient of unequal cost sharing. For example, if it were discovered that unions fared very badly under the cost-formula procedure, the arbitration tax rate for unions might be set lower than that for management.

This feature may be viewed as a desirable aspect of cost-formula arbitration, but it may have negative consequences as well. On the positive side, a legislative body could regulate the overall monetary cost of settlements, both negotiated and arbitrated, by manipulating the arbitration tax rates. Thus, if the legislature decides that, as a matter of public policy, public sector collective bargaining settlements are becoming too costly, this can be rectified by raising the arbitration tax rate on unions and lowering it on management. Thus, it could be argued that cost-formula arbitration can be used more easily than other procedures to produce settlements that are not viewed as "harmful to the public interest." On the negative side, the ability to affect the level of settlements by manipulating the tax rates may, in some circumstances, provide an irresistible temptation for each new administration to adjust the arbitration tax rates to produce a "more desirable" pattern of settlements. Such continual tinkering could easily eliminate the faith of the bargaining parties in the equity of the procedure.

At this point it is appropriate to summarize the desirable characteristics of cost-formula arbitration which lead us to suggest it. There are three particularly salient features.

First, the parties will find the imposed costs on arbitration usage an additional incentive to make genuine offers in prior negotiations. This is so because, not only is arbitration costly to use, but the costs increase directly with the magnitude of the disagreement between the parties. In addition, the constituents of negotiators on both sides will be able to see in a clear and direct way the cost of clinging to extreme positions. Thus, the penalty involved in being "unreasonable" in cost-formula arbitration has much in common with the use of the strike in private-sector bargaining.

Second, the parties have some incentive to maintain their genuine offers into the arbitration process if arbitration must be used. Thus, the arbitrator will have more realistic information about the preferences of the parties than with conventional arbitration procedures, where the parties may feel they have some incentive to stake out relatively extreme positions. This aspect of cost-formula arbitration should enable arbitrators to fashion awards which the parties can live with and which are "Pareto Superior," i.e., which are better for both parties than alternative awards.

Third, the costs of arbitration usage under cost-formula arbitration are a direct function of the size of the bargaining unit. Ceteris paribus, a unit with twice as many employees will face an arbitration tax twice as large in absolute amount. Thus, under cost-formula arbitration, there is a penalty for using arbitration and that penalty is not dissipated when the bargaining units involved
are large. Of course, other fixed costs of arbitration usage e.g., lawyer's fees, will still pose a relatively larger obstacle to small bargaining units than to large ones.

### ALTERNATIVE PROCEDURES

A clear policy issue in evaluating any impasse procedure is the way it compares to alternative procedures. The purpose of this section is to compare cost-formula arbitration to a number of likely alternatives. We can begin with final-offer arbitration.

Final-offer arbitration (by package) was designed to stimulate genuine offers in bargaining by making the use of arbitration risky [13]. However, it has raised a number of objections from practitioners and theorists. Some arbitrators have reported difficulty in choosing between two final offers which they felt were both badly flawed [14]. Cost-formula arbitration clearly reduces this difficulty since the arbitrator's award is not limited to a choice of the parties' offers.

Another problem with final-offer arbitration is that, while *ex ante* costs (the costs of uncertainty) are imposed on both sides, after an award only one party suffers *ex post*. That is, final-offer arbitration has a clear winner and a clear loser and, in some cases, this may provide an inducement rather than a deterrent to the use of arbitration. This could occur if one or both parties is not risk averse, i.e., does not view uncertainty as costly, or if one or both parties has unduly optimistic expectations about the arbitrator's award. Again, cost-formula arbitration reduces this difficulty and it does so in much the same way as a strike, by imposing costs both *ex ante* and *ex post* on both parties.

Perhaps the most serious problem with final-offer arbitration has been the reluctance of legislators to adopt it and arbitrators to use it in its pure (by package) form. This has given rise to a number of hybrid forms including final-offer by issue and final-offer with a fact finder's report as a third choice for the arbitrator. Or, the arbitrator may permit the parties to circumvent the risk of an unfavorable award by allowing them to delay their ultimate offers until the end of the hearing or by outlining a preferred settlement so that the parties can withdraw from the hearing and "negotiate a settlement" based on the arbitrator's suggestions. These hybrids share little of the risk of "pure" final-offer procedures.
and seem likely to carry nearly as much risk of "chilling" bargaining and creating unworkable and "inefficient" awards as conventional arbitration does.\textsuperscript{10} Therefore, there is a need to find alternative procedures which, like pure final-offer arbitration, are designed to encourage negotiated settlements but which, unlike pure final-offer arbitration, legislators may be willing to adopt and arbitrators may be willing to use.

Another alternative involves simply raising the \textit{per diem} or flat charge to the parties for the use of arbitration. Accordingly, some analysts have suggested that governments cease to subsidize the use of arbitration as is now commonly done \textsuperscript{9}.\textsuperscript{11} As has already been indicated, this technique will provide negotiating incentives that will vary substantially with the size of the bargaining unit in question. If extremely large fees are adopted so as to provide negotiating incentives in larger units, smaller units will often find the fees completely prohibitive and that may leave smaller units with no effective impasse procedure at all. Cost-formula arbitration can remedy these deficiencies.

Another procedure worthy of mention, albeit one that has not yet been adopted in any jurisdiction of which these authors are aware, involves a proposal made by Wheeler \textsuperscript{3}.\textsuperscript{12} Wheeler's procedure, which he calls "closed offer," involves conventional arbitration, except that concessions made by parties in bargaining are inadmissible as arguments in the closed-offer arbitration hearing. This, it is hoped, will allow the parties to pull back to previous positions in arbitration, thus mitigating any tendency by parties to avoid concessions in negotiations because they are likely to be costly if arbitration eventuates.

Both closed-offer arbitration and cost-formula arbitration should provide incentives to negotiate, although the incentives should be stronger in the latter case due to the cost-inducements. However, a more salient difference between the two procedures emerges if arbitration is actually invoked. In closed offer, the arbitrator may find him/herself in the same dilemma conventional arbitration provides. There may be two extreme offers that tell the arbitrator little about how the parties value the different items in their packages. It can be a difficult task to fashion a workable and "efficient" award in such circumstances. In cost-formula arbitration, the parties have an incentive to make more realistic, and thus more revealing -- offers up to and including the stage at which arbitration is invoked. This will provide the arbitrator with information that is valuable in fashioning an award, information that will probably not be forthcoming under a closed-offer procedure.

It would be possible to compare cost-formula arbitration to "open-ended" procedures, e.g., those in which the final step is a nonbinding fact finder's report.

\textsuperscript{10} For evidence on this point see \textsuperscript{16}. Reference \textsuperscript{17} discusses these issues in greater detail.

\textsuperscript{11} States which subsidize, at least in part, the use of public sector interest arbitration include Pennsylvania, Rhode Island, and Washington.

\textsuperscript{12} Some features of closed offer were incorporated in the arbitration format under the steel industry's Experimental Negotiating Agreement. See \textsuperscript{18}.
However, the advantages of cost-formula arbitration in this case are precisely analogous to the well-known advantages of conventional arbitration.

It is clear that cost-formula arbitration shares several features with proposals to resolve public sector impasses through a statutory strike. The statutory strike involves no third-party award. Rather, while work continues, both workers and management are "fined" some fixed or variable percentage of the wage bill until agreement is reached [1, pp. 102-103, 19]. Thus, for example, the workers might receive only half their normal wages while management is forced to pay 150 per cent of its normal wage bill, the difference either being lost to the parties (in some proposals) or recoverable to the parties after agreement is reached (in other proposals).

The notion of imposing direct financial costs on the parties to provide negotiating incentives is similar in both the statutory-strike and the cost-formula-arbitration proposals. However, the former provides for no third-party determination. The principal difficulty with the statutory strike concept is the same one that faces final-offer arbitration, acceptability. Statutory strike proposals have been around for approximately thirty years, but they have yet to find favor with the parties or with policy makers [19, p. 73, fn. 1].

It might also be mentioned that, in principle, the cost-formula feature could be combined with a number of other impasse procedures. Thus, adding a cost-formula aspect to final-offer arbitration would strengthen the inducements for voluntary settlement as well as narrowing the differences between final offers when the procedure actually is invoked. This may be appropriate, as there is now some theoretical evidence that those inducements may not be as strong as previously thought [20].

Similarly, a cost-formula feature could be added to Wheeler's closed-offer procedure. So modified, closed offer would retain its inducements to make realistic offers prior to arbitration but it would have the added advantages of increasing the incentive to settle by negotiation (due to the added cost), and of motivating the parties to make realistic offers if arbitration becomes necessary.

CONCLUSIONS

Cost-formula arbitration would seem to have a number of advantages over other impasse procedures. It provides inducements to negotiate without any limitations on the award-making discretion of the arbitrator. The inducements do not decrease as the size of the bargaining unit increases. Finally, there are inducements not only for parties to settle on their own, but also for them to narrow their differences even when they can't settle on their own.

Of course, no procedure will satisfy all interested parties. The principal drawback of cost-formula arbitration which seems apparent in advance is the administrative difficulty of actually calculating the costs. Some analysts and practitioners may find the calculation overly complex, especially when
contrasted with the relative simplicity of many conventional and final-offer arbitration procedures.

On the other hand, cost-formula arbitration contains some advantages that may make it attractive to policy makers and to analysts. It provides incentives to negotiate (which analysts almost unanimously insist upon) while it avoids the seeming inequity of the "all or nothing" final-offer approach (which policy makers and arbitrators have found so distasteful). The parties may be expected to object to the costliness of the procedures, but they may still prefer it to the alternatives. Thus, some public employees that have looked upon final-offer arbitration with a jaundiced eye may consider cost-formula arbitration to be a lesser evil. On balance, the net advantages of cost-formula arbitration seem to make it worthy of consideration by those contemplating the adoption or modification of public sector impasse procedures.

ACKNOWLEDGEMENTS

Helpful comments were provided by Roger Bowlby, Vincent Crawford, Henry Farber, and Thomas Kochan.

REFERENCES


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